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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
HUBERT HAUSER, ET AL. : EXAMINER: PARKER, F.
SERIAL NO: 10/518,534 :
FILED: SEPTEMBER 13, 2005 : GROUP ART UNIT: 1792
FOR: MARKING HEAT-TREATED :
SUBSTRATES

AMENDED APPEAL BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

This is an appeal of the Final Action mailed July 17, 2007, that presented a Final rejection of Claims 18-22, 24-29 and 35. A Notice of Appeal was filed November 16, 2007.

I. REAL PART IN INTEREST

The real party in interest in this appeal is the Assignee, Saint-Gobain Glass France.

II. RELATED APPEALS AND INTERFERENCES

Appellants, Appellants' legal representative, and the Assignees are aware of no appeals which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF THE CLAIMS

Claims 18-22, 24-29 and 35 are pending in this application. Claims 18-22, 24-29 and 35 have been finally rejected and form the basis for this appeal and Claims 1-17, 23 and 30-34 have been cancelled. The attached claim index includes a clean copy of appealed Claims 18-22, 24-29 and 35.

IV. STATUS OF THE AMENDMENTS

An Amendment After Final was filed on October 15, 2007, which resulted in an Advisory Action being mailed on October 26, 2007 that indicates that the Amendment filed October 15, 2007 has been entered and that the Final rejection of Claims 18-22, 24-29 and 25 over the prior art of record is maintained but overcomes the rejection of Claim 22 under 35 U.S.C. §112, second paragraph.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER¹

Independent method Claim 18 sets forth a method for visual marking glass panes 1 tempered and then heat-treated, the method comprising modifying a marking layer 8 deposited on a surface of a tempered glass pane 1 that visually indicates that the heat treatment has been carried out by producing a marking field 3 with an uneven surface structure on the surface of the tempered glass pane, the surface of the marking field 3 having a surface structure and adhesively bonding the marking layer 8 by heat treatment to the surface of the tempered glass pane such that the marking layer 8 deposited on the glass pane

¹ It is Appellants' understanding that, under the rules of Practice before the Board of Patent Appeals and Interferences, 37 C.F.R. §41.37(c) requires that a concise explanation of the subject matter recited in each independent claim be provided with reference to the specification by page and line numbers and to the drawings by reference characters. However, Applicants' compliance with such requirements anywhere in this document should in no way be interpreted as limiting the scope of the invention recited in all pending claims, but simply as non-limiting examples thereof.

is permanently bonded to the marking field 3 wherein the color of the marking layer 8 is thereby irreversibly modified by the heat treatment, and wherein the marking field 3 configured for depositing the marking layer 8 is produced on a smooth surface 4 of the tempered glass pane 1. The foregoing features are believed to be properly illustrated in Figures 1 and 2 of the present application and are supported by the specification as originally filed as explained hereinafter.

As discussed on page 3, line 29 through page 4, line 17, the object of the invention is to provide a method for the visual marking of substrates undergoing a heat treatment, which ensures that the marking color cannot be mechanically removed from the surface of the substrate, in such a way that the substrate is permanently marked. The aim of the invention is also to provide a substrate, in particular a glass pane, provided with a marking according to the invention.

As discussed at page 6, lines 11-19 of the specification, because of the intimate bonding between the marking layer and the structured surface of the subjacent marking field in accordance with the present invention, it is consequently no longer possible to completely remove the color with a glass plane, a blade or other tools. Even by rubbing strongly with glass wool, residues of color could still be identified using a microscope. Likewise, it is still possible to determine without any problem, by analysis, what color was employed.

Independent Claim 35 claims a method for visual marking glass panes 1, tempered and then submitted to a heat-soak test, with a marking layer 8 that visually indicates the heat-soak-test has been carried out, the method including the steps of producing before the heat-soak-test at the surface 4 of the smooth glass pane 1 a marking field 3 comprising an uneven surface structure and depositing, after the tempering, a marking color 8 on the marking field 3 for producing the marking layer, wherein the marking color 8 fills the uneven surface structure. The foregoing limitations are also believed to be properly illustrated in Figures 1

and 2 of the present application, wherein the uneven surface having intermediate spaces 7 are filled in by the marking color 8 of the marking layer. Such uneven surface comprises the additional marking field 3 added to the stamp as discussed at page 7, line 11 through page 8, line 14.

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 18, 20, 21, 22, 26-28 and 35 have been rejected under 35 U.S.C. §102 as being anticipated by or, in the alternative, under 35 U.S.C. §103 as being obvious over Dauba et al. (USP 6,430,964) and Claims 19, 24-25 and 29 have been rejected under 35 U.S.C. §103 as being unpatentable over Dauba et al.

VII. ARGUMENT

A. The Rejection of Claims 18, 20-22, 26-28 and 35 under 35 U.S.C. §102 as being anticipated by or, in the alternative, under 35 U.S.C. §103 as being obvious over Dauba et al.

1. Independent Claim 1

The Final Action asserts that the marking disclosed in Dauba et al. is indelible so that there is no risk of marking removal ‘during handling operations’ and cites the discussion at column 4, lines 14-38 and column 7, lines 25-34 in support of this conclusion and thus concludes Claim 1 and the claims dependent therefrom are anticipated by Dauba et al. The Examiner states, however, that the discussion at columns 3 and 8 acknowledges that the indelible mark is applied without risk of the ink being removed “during handling operations”.

Responsive to the foregoing conclusions by the Examiner, Applicants have emphasized that the marking in Dauba et al. is specifically indicated as being indelible or nonremovable only under the limited circumstances of not “being removed during handling operations”. Applicants therefore submit that the correct interpretation of the teachings of Dauba et al. is that the indelible nature of the marking as taught by this reference is limited

only to normal handling operations of the glass rather than Applicants' claimed limitation of "adhesively bonding the marking layer by heat treatment to the surface of the tempered glass pane such that the marking layer deposited on the glass pane is permanently bonded to the marking field" (emphasis added). In this regard, it is submitted that the Examiner has overly broadly interpreted the teachings of Dauba et al. and has failed to acknowledge that the marking in Dauba et al. is not disclosed as being capable of being rendered indelible under conditions other than normal handling and storage. More particularly, as noted at column 3, line 62 through column 4, line 1, Dauba et al. intends to provide for the substance forming the marking to be removed at higher temperatures and claims this feature in Claim 6 by stating that in the method according to Claim 1, said substance "can be removed at a temperature above the temperature of the heat treatment defining the resulting optical characteristic". Thus, the indelible nature of the marking in Dauba et al. is clearly limited solely to handling operations whereas the present invention permits the marking layer deposited on the glass pane to be permanently bonded to the marking field.

Applicants further submit that the Examiner's interpretation that the glaze on the glass pane is the equivalent of the "marking field" of the present invention is incorrect, particularly insofar as Dauba et al. specifically defines the term "glazing" as "encompassing single or multiple glass panes, such being bare or coated with thin films such as pyrolytic films, or with thick films, such as enamels", as specified at column 1, lines 4-8. Thus, Applicants submit that Dauba et al. only teaches two features, the first being glass panes and the second being the application of a substance thereto which can be colored, if desired. Thus, Dauba et al. only utilizes a glass pane and a substance applied thereto as compared with Applicants' method of modifying a marking layer 8 deposited on a surface 4 of a tempered glass pane 1, that visually indicates that the heat treatment has been carried out by producing a marking field 3 with an uneven surface structure on the surface of the tempered glass pane 1, the

surface of the marking field 3 having a surface structure and adhesively bonding the marking layer 8 by a heat treatment to the surface of the tempered glass pane such that the marking layer 8 deposited on the glass pane is permanently bonded to the marking field 3 as specifically claimed in Claim 18 and as illustrated in Figure 2.

In view of the foregoing deficiencies of Dauba et al. and the lack of providing combination of a marking layer 8, a surface 4 of a glass pane 1 and a marking field 3 in the method claimed in Claim 18, Applicants submit that Claim 18 clearly patentably defines over Dauba et al.

With respect to the Examiner's indication that, in the alternative, Claim 18 is rejectable over Dauba et al. under 35 U.S.C. §103 as being obvious, it is submitted that there is clearly no teaching or disclosure in Dauba et al. of the method limitations now claimed and that, to the contrary, the Examiner's attempted modification of Dauba et al. would destroy Dauba et al. for its intended purpose and function of permitting removal of a marking substrative under conditions other than normal handling and storage and thus be contrary to U.S. patent practice and procedure. In this regard, it is respectfully submitted that the Supreme Court requires any rejection made under 35 U.S.C. §103 to include a determination of the scope and content of the prior art followed by ascertaining correctly the differences between the prior art and the subject matter of the claims at issue. See Graham v. John Deere, 383 US 1, 17-18, 148 USPQ 459, 467 (1966). In determining the scope and content of the prior art and ascertaining the differences between the prior art and the subject matter of the claims at issue, the precedent of the U.S. Court of Appeals for the Federal Circuit as to interpreting the teaching of the prior art references at issue is clearly binding on the PTO. See In re Lee, 277 F.3d 1338, 1345, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002) ("As discussed in National Labor Relations Bd. v. Ashkenazy Property Management Corp., 817 F.2d 74, 75 (9th Cir. 1987) an agency is "not free to refuse to follow circuit precedent.").

Accordingly, in interpreting the teachings of Dauba et al., it is clearly erroneous for the Examiner to attempt to view this reference as teaching the limitations presently claimed insofar as there is no suggestion or teaching of Applicants' combined limitations mentioned above and, in fact, the teachings of Dauba et al. teach away from Applicants' claimed invention by limiting the indelible nature of the substance applied to only instances of handling operations and storage.

2. Independent Claim 35 specific arguments

Independent Claim 35 differs from claim 1 by claiming the step of producing before a heat-soak-test at the surface 4 of the smooth glass plane 1 a marking field 3 comprising an uneven surface structure, and depositing, after the tempering, a marking color on the marking field 3 for producing the marking layer 8, wherein the marking color fills the uneven surface structure. In view of the fact that the above-noted steps, as shown in Figure 2 of the present application, have no corresponding teaching or disclosure in Dauba et al. insofar as Dauba et al. only utilizes the step of applying a substance to a glass pane, it is submitted that such reference clearly does not suggest the step of producing before a heat-soak-test at the surface of a smooth glass plane a marking field comprising an uneven surface structure nor the subsequent step of depositing, after the tempering, a marking color on the marking field for producing marking layer wherein the marking color fills the uneven surface structure. Without a clear teaching or any teaching in Dauba et al. of providing a marking field with an uneven surface structure and filling the uneven surface structure with the marking color as presently claimed, it is submitted that Claim 35 clearly patentably defines over Dauba et al.

B. The rejection of dependent Claims 19-22 and 24-29 as being anticipated by Dauba et al. under 35 U.S.C. §102 or, in the alternative, as being obvious over Dauba et al. under 35 U.S.C. §103.

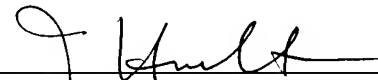
With further regard to the rejection of dependent Claims 19-22 and 24-29 under 35 U.S.C. §102 as being anticipated by Dauba et al. or in the alternative under 35 U.S.C. §103 as being obvious over Dauba et al., it is submitted that Dauba et al. does not teach the limitations of each of these dependent claims when combined with the limitations set forth in Claim 18. Accordingly, as these dependent claims each depend directly from Claim 18, it is submitted to be error to reject such claims over Dauba et al. for the same reasons as emphasized above with regard to independent Claim 18.

CONCLUSION

Accordingly, it is respectfully submitted that the rejection of Claims 18, 20-22, 26-28 and 35 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over Dauba et al. as well as the rejection of Claims 19, 24-25 and 29 under 35 U.S.C. §103(a) as being unpatentable over Dauba et al. are clearly improper for the reasons noted above and should be REVERSED under the controlling precedent also cited above.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

1-17 (Cancelled).

18. A method for visual marking glass panes tempered and then heat-treated, the method comprising:

modifying a marking layer deposited on a surface of a tempered glass pane, that visually indicates that the heat treatment has been carried out by producing a marking field with an uneven surface structure on the surface of the tempered glass pane, the surface of the marking field having a surface structure and adhesively bonding the marking layer via heat treatment to the surface of the tempered glass pane such that the marking layer deposited on the glass pane is permanently bonded to the marking field wherein the color of the marking layer is thereby irreversibly modified by the heat treatment, and wherein the marking field configured for depositing the marking layer is produced on a smooth surface of the tempered glass pane.

19. The method as claimed in claim 18, wherein the marking field is produced on the surface of the glass pane before the glass pane is tempered.

20. The method as claimed in claim 18, wherein a color containing a thermochromic pigment is used as the marking layer, the color of which pigment is irreversibly modified at a temperature for the heat treatment.

21. The method as claimed in claim 18, wherein the heat-treatment is done via a hot storage test or a heat soaking test.

22. The method as claimed in claim 18, wherein the marking field configured for depositing the marking layer is produced by a chemical and/or mechanical action on the surface of the glass pane, during which hollows are formed in the surface into which the marking layer can penetrate.

23. (Canceled).

24. The method as claimed in claim 18, wherein the coating is deposited on the surface of the glass pane with defined open intermediate spaces into which the marking layer is introduced.

25. The method as claimed in claim 18, wherein the coating is deposited by screen printing and is then baked before the marking layer.

26. The method as claimed in claim 18, wherein the marking layer is baked during the heat tempering of the glass pane.

27. The method as claimed in claim 18, wherein the marking field comprises a portion of a marking stamp provided on the surface of the glass pane.

28. The method as claimed in claim 18, wherein a size and surface structure of the marking field and an amount and consistency of the marking layer to be deposited on the marking field are tailored to one another such that, in mass production, a same amount of material of the marking layer is always deposited in the marking field.

29. The method as claimed in claim 18, wherein the heat treatment has a maximum temperature of between 180 and 340°C.

30-34 (Canceled).

35. A method for visual marking glass panes tempered and then submitted to a heat-soak test, with marking layer that visually indicates that the heat-soak-test has been carried out, the method comprising:

producing before the heat-soak-test at the surface of the smooth glass pane a marking field comprising an uneven surface structure, and

depositing, after the tempering, a marking color on said marking field for producing the marking layer, wherein the marking color fills said uneven surface structure.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.